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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,955	08/26/2003	Tricia Susan Reighard	IP-023694	3725
1726	7590	03/10/2005	EXAMINER	
INTERNATIONAL PAPER COMPANY			PATTERSON, MARC A	
6285 TRI-RIDGE BOULEVARD			ART UNIT	
LOVELAND, OH 45140			PAPER NUMBER	

1772

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,955

Applicant(s)

REIGHARD ET AL.

Examiner

Marc A Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-26 is/are pending in the application.
- 4a) Of the above claim(s) 13, 14, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 15-24 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 12, 16, 17, 19, 22 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/26/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 12 and 15 – 24, drawn to a barrier laminate, classified in class 428, subclass 34.2.
 - II. Claims 13 – 14 and 25 – 26, drawn to a method for extending shelf life, classified in class 156, subclass 60.
2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can be used in a materially different process of using, such as the storage of liquids other than fruit juice.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Melvin Fletcher on February 1, 2005, a provisional election was made with traverse to prosecute the invention of I, claims 1 – 12 and 15 – 24. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 13 – 14 and 25 – 26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

5. The disclosure is objected to because of the following informalities: There is no Claim 11, and Claims 12, 16 – 17, 19, 22 and 24 are dependent on Claim 11.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term ‘Plexar’ is a trade name and therefore renders the Claim indefinite.

8. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In Claim 9 it is stated that the second oxygen barrier layer is separated from the first tie layer, but Claim 9 is dependent on Claim 1, which states that the second oxygen barrier layer is applied directly on the first tie layer; the claim therefore appears to be contradictory.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 – 7, 9 – 10, 12, and 15 – 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibbons et al (U.S. Patent No. 4,888,222).

With regard to Claims 1 – 3, 5, 7, 9, and 12, Gibbons et al disclose a barrier laminate (oxygen impermeable laminate; column 4, lines 57 – 61) comprising a paperboard substrate (therefore having a first surface and second surface; column 4, lines 57 – 68), layer of polyolefin applied directly onto the second surface of the paperboard substrate (low density polyethylene; column 4, lines 67 – 68; column 5, lines 1 – 9; Figure 1), a first layer of polyamide, which is an abuse resistant polymer, applied directly onto the first surface of the paperboard substrate (abuse resistant polymer comprising nylon; column 5, lines 2 – 9; Figure 1), a first oxygen barrier layer of ethylene vinyl alcohol applied directly onto the first polyamide layer (column 5, lines 9 – 10, column 7, lines 49 – 57; Figure 1), a caulk layer applied directly on the barrier layer (column 5, lines 12 – 16; Figure 1) and a polyolefin layer applied onto the caulk layer as the innermost and product contact layer (lastly coated thereon therefore in contact with any product contained by the laminate, a layer of low density polyethylene; column 5, lines 15 – 19); Gibbons et al disclose additional layers of abuse resistant polymer, tie layer and oxygen barrier material (column 8, lines 34 – 38) and therefore disclose a second layer of polyamide, a first tie layer, a

second oxygen barrier layer and a second tie layer comprising ethylene vinyl alcohol between the oxygen barrier layer and caulk layer of Figure 1.

With regard to Claim 4, the first and second polyamide layers comprise nylon 6 (column 5, line 6).

With regard to Claim 6, the tie layers comprise an ethylene copolymer with a grafted functional group (column 8, lines 24 – 30); the claimed aspect of the tie layers being an ethylene based copolymer modified with maleic anhydride functional groups therefore reads on Gibbons et al.

With regard to Claim 10, as stated above, Gibbons et al disclose additional layers of abuse resistant polymer, tie layer and oxygen barrier material, and therefore also discloses an additional oxygen barrier layer comprising ethylene vinyl alcohol, which is a polyolefin, and an additional tie layer.

With regard to Claims 15 – 24, Gibbons et al disclose a container for liquid food (carton; column 1, lines 41 – 46), therefore including citrus juice, therefore a perishable product, that is sealed (column 1, lines 53 – 56), and the laminate therefore comprises a blank. The claimed aspects of the container being hot filled, to kill microorganisms, and cooling the product, and cold filled, and stored at room temperature are given little patentable weight, as the limitations are directed to intended uses of the laminate, rather than structural limitations.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbons et al (U.S. Patent No. 4,888,222).

Gibbons et al disclose a laminate comprising an ethylene vinyl alcohol layer , as discussed above. Gibbons et al fail to disclose ethylene vinyl alcohol comprising 26 – 44%. However, Gibbons et al disclose an ethylene vinyl alcohol comprising ethylene, and disclose an ethylene vinyl alcohol comprising an amount of ethylene sufficient to be used as an oxygen barrier layer, because the layer is an oxygen barrier layer. Therefore, one of ordinary skill in the art would have recognized the utility of varying the amount of ethylene to obtain the desired oxygen barrier property. Therefore, the oxygen barrier property would be readily determined by through routine optimization of the amount of ethylene by one having ordinary skill in the art depending on the desired use of the end product as taught by Gibbons et al.


It therefore would be obvious for one of ordinary skill in the art to vary the amount of ethylene in order to obtain the desired oxygen barrier property, since the oxygen barrier property would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Gibbons et al.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marc A. Patterson, PhD.
Examiner
Art Unit 1772